

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052196 A2

(51) International Patent Classification⁷: C21C 5/52, 5/56

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/IB2004/003873

(22) International Filing Date:

25 November 2004 (25.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

UD2003A000231

27 November 2003 (27.11.2003) IT

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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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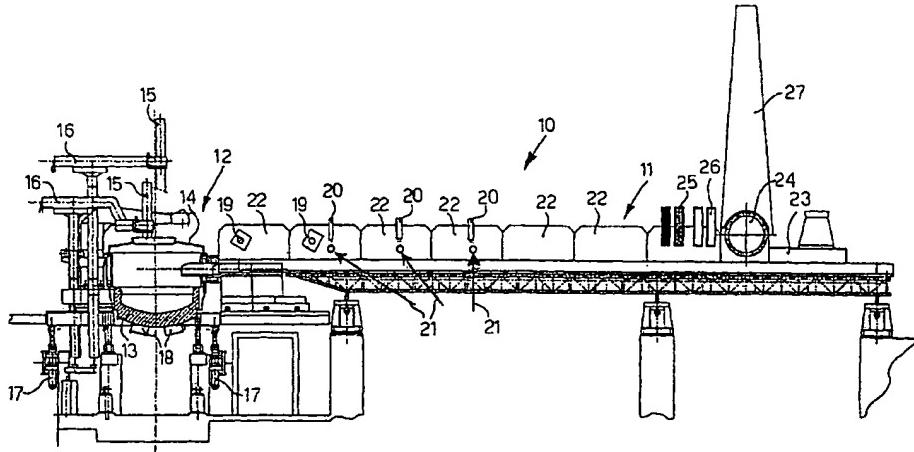
— without international search report and to be republished upon receipt of that report

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(54) Title: METHOD FOR PRE-HEATING, TRANSFORMING AND MELTING A METAL CHARGE AND RELATIVE PLANT

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(57) Abstract: Method and plant for pre-heating, transforming and melting a metal charge comprising metal scrap, in an electric arc furnace (12) associated with a tunnel (11) to transport, pre-heat and discharge the scrap. The furnace (12) comprises a hearth (13) and a roof (14) through which the electrodes (15) pass. The method provides that the furnace (12) is weighed at least periodically in order to detect the quantity of discharged scrap present inside the furnace (12) itself, that the temperature of the liquid bath inside the furnace (12) is detected at least periodically and that at least the discharge delivery of the scrap inside the furnace (12) is detected by weighing and is regulated in order to maintain the temperature of the liquid bath around a pre-determined value.